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ABSTRACT

The Ability Explorer (AE) is a newly developed self-report inventory of abilities that is appropriate for group or individual administration. There are machine-scorable and hand-scorable versions of the test, and there are two levels. Level 1 is for students from junior high to high school, and Level 2 is for high school students and adults. Separate scores are reported for 14 work-related abilities that are considered important for employers: (1) artistic; (2) clerical; (3) interpersonal; (4) language; (5) leadership; (6) manual; (7) musical/dramatic; (8) numerical/mathematical; (9) organizational; (10) persuasive; (11) scientific; (12) social; (13) spatial; and (14) technical/mechanical. Materials for the AE are attractive and easy to use, although the hand-scorable version is more difficult to understand than the machine-scorable version. Extensive information is provided in the manual about reliability, intercorrelations between ability scales, and frequency distributions, but the characteristics of the norm group used to develop these statistics are not generally addressed, except in table form. The AE appears to be a valuable assessment tool with a sound theoretical basis and useful practical applications. A potential problem is the accuracy of its self-report measure. Recommendations are made for clarifying information with the hand-scorable version. (Contains three references.) (SLD)

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Ability Explorer
A Review and Critique

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Title: Ability Explorer - Levels 1 and 2

Authors: Joan C. Harrington and Thomas F. Harrington

Publisher: The Riverside Publishing Company

Dates of Publication: 1996 Preliminary Technical Manual Levels 1 & 2, Hand-Scorable Assessment Booklet, Machine-Scorable Assessment Document Levels 1 & 2, Directions for Administration of the Machine-Scorable Assessment

Norms: 8,425 students, grades 6-12, ages 11-18

Time required to administer: 35-45 minutes

Costs: Machine-Scorable Booklet - \$1.80 each (\$45.00 per 25 booklets)

Hand-Scorable Booklet - \$1.40 each (\$35.00 per 25 booklets)

Scoring Service - \$2.10 per individual report, \$.60 per counselors report

Specimen Set - No charge

Description

The Ability Explorer (AE) is a newly developed self-report inventory of abilities that is appropriate for group or individual administration. There are two forms of the test, machine-scorable and hand-scorable, and also two levels of the test. Level 1 is designed for students from junior high to high school. Level 2 is designed for high school students as well as adults. Both levels are written at a 5th grade or below reading level. Separate scores are reported for 14 work-related abilities which are considered important to employers. These categories are also directly related to U.S. Department of Labor publications such as the *Guide for Occupational Exploration* (GOE). The 14 categories assessed are Artistic, Clerical, Interpersonal, Language, Leadership, Manual, Musical/Dramatic, Numerical/Mathematical, Organizational, Persuasive, Scientific, Social, Spatial, and Technical/Mechanical. Available test materials consist of a Hand Scorable Assessment Booklet, Machine Scorable Assessment Document, Directions for Administration of the Machine-Scorable Assessment, and a Preliminary Technical Manual. A Counselor's Manual is expected to be available in the near future.

The machine-scorable version of the Ability Explorer is divided into three parts. Part I lists 140 activity statements such as "Writing business letters", "Obtaining people's trust", and "Being athletic". Ten statements are included for each of the 14 categories. Individuals are asked to rate their ability to do the activity on a scale which ranges from 1 - very poor, to 6 - very good. Therefore, the highest possible score for any category is 60, and the lowest possible score is 6. The individuals' raw scores in each of the 14 categories are then compared with the scores of individuals in the norm group to determine whether they rate themselves high, medium, or low, by comparison. Part II surveys involvement in activities related to the 14 ability areas. The individual is asked to rate their current ability to perform 112 activities by using the categories of (3) very well, (2) well, (1) not well, or (NT) never tried. In Part III, the individual is asked to provide information regarding grades received in past courses, also related to the 14 ability areas. Part II and III are not included in the hand-scorable version. Rather, AE users are guided through a series of exercises designed to help them explore the development of their abilities and to discover the type of activities that are likely to help them improve these selected abilities. Finally, a description of the characteristics of individuals who are considered to have high levels of ability in each of the 14 categories is provided, as well as some corresponding careers in each of these ability areas. The machine-scorable form provides the individual with a narrative, computer-generated report tailored to the grade level and stated goals of that individual, and also includes exercises for further exploration of their abilities, although these exercises are not as extensive as those performed by the individual using the hand-scorable format. A counselors' report is also provided which includes a summary of the same information contained on the individual score report as well as percentile scores for each of the ability areas.

Practical Evaluation

Materials for the Ability Explorer are attractively designed and easy to use. The Directions for Administration booklet contains very explicit directions and is easy to read and follow. The booklet also contains a statement regarding the administration to students with special needs such as those with Limited English Proficiency. Care has been taken to provide information regarding the difference between ability and aptitude, as well as to clearly describe the purpose of the instrument. The administrator is encouraged to share this information and/or to make copies for individuals who will be completing the assessment. Individuals taking the test are instructed to think about how well they could perform the activity if given the chance, not how well they may be able to perform the activity now. Individuals are also cautioned not to rate how much they enjoy the activity.

The hand-scorable version is somewhat more difficult to understand and does not contain as much information regarding the purpose of the assessment. There is some opportunity for error even if directions are read carefully. For example, when tearing the two sections of the booklet apart before taking the test, it would be possible to break the seal between the pages, and inadvertently get pages out of order. This of course would make the scores invalid, since the carbon used could cause scores to appear on the wrong side of the page and would then be totaled incorrectly. It would also be possible for stray marks to appear and confuse the scoring if the individual user does not separate the two sections. It is, however, quite simple to total the scores, since both vertical and horizontal gridlines are provided as a guide for the user to more easily see which numbers to add together for each category.

Technical Evaluation

Extensive information is provided in the Preliminary Technical Manual regarding reliability, intercorrelations between ability scales, and frequency distributions. However, the manual does not address the characteristics of the norm group used to develop these statistics, except in tables which show distributions by gender, ethnic group, and age. Norm groups used in developing the AE are impressive in terms of their size and diversity. The norm group for the Level 1 assessment consisted of 4,893 individuals ranging in age from 11 to 18, although most are clustered in the 12 to 15 age range. The norm group for Level 2 consisted of 3,532 individuals ranging from ages 11-18 with most individuals clustered in the 14-18 age range. These individuals are from a variety of ethnic backgrounds, including African American, Hispanic, and Asian. Individuals in both groups were in grades 6 through 12. Adult norms are currently being developed.

Reliabilities on the 14 subscales for the Level 1 test, range from .83 to .91 with the lowest reliability found in the Spatial and the Clerical scales, and the highest in the Technical/Mechanical scale. Reliabilities for Level 2 subscales also range from .83 to .91, with the lowest reliability found on the Manual scale and the highest, again, on the Technical/Mechanical scale. Separate reliabilities are also provided by gender for each of the scales and also fall in the .8 range. As expected, because of the limited number of responses, reliabilities for each of the separate activity statements are somewhat lower, ranging from .63 for statements related to the Manual scale to .82 for statements related to the Technical/Mechanical scale. Again, these statistics are provided by gender and are similar to the overall reliabilities for activity statements. These reliability scores are generally good, however no information is provided in the Preliminary Technical Manual regarding the method of measuring reliability, i.e., split-half, test-retest, etc.

Although validity is mentioned in the introduction statement preceding the pages of tables found in the Preliminary Technical Manual, none of these statistics were actually included in the manual. Since it is a preliminary manual, it is possible that the validity tables are still being developed. The AE does have high face validity in that the activity statements look like they would be related to the 14 ability areas.

Summary Evaluation

The Ability Explorer has not yet been formally reviewed, so other reviewers comments are not available at this time. It appears to this reviewer that The Ability Explorer is a valuable assessment tool with a sound theoretical basis and useful practical applications. Useful background information regarding the development of the test and the rationale for its' development is found in the Preliminary Technical Manual. The test is easy to administer and is equally valuable as a group or individual assessment tool. This assessment provides information to the individual user and to the counselor regarding an expanded category of abilities and associated careers that have not been included in other career assessment tools. A potential problem of the Ability Explorer is the fact that it is a self-report of abilities, and therefore, could not be considered completely accurate. However, it is the feeling of the test authors, and this reviewer, that it is important to identify an individuals' self perception before predicting success or failure in particular areas. In this way the individual can take steps to develop and improve their own abilities, and possibly to modify their self-perception when presented with the information gained from the Ability Explorer. The Ability Explorer is unique in its' attempt to encourage self-awareness and planning on the part of the student. Also, because of the ease and the short time period required for administration, the AE can be given

several times throughout the junior high and high school years to allow the student to track their progress in selected ability areas.

This reviewer would recommend that the information provided to users of the Machine-Scorable Assessment Booklet, regarding differences between ability and aptitude, and the purpose of the instrument, also be provided to any individual using the Hand-Scorable Assessment Booklet. This information could be incorporated into the booklet itself, or could simply be a suggestion provided to the administrator in the Technical Manual, or the Counselor's Manual. The administrator should be encouraged to provide help in scoring and interpreting the hand-scorable version as necessary for each individual. It would also be helpful for potential test administrators to have a brief description of the norm group and its characteristics early in the technical manual, perhaps in a separate table, rather than making the user extract information from the frequency distribution tables. This would allow a more accurate assessment of the usefulness of the Ability Explorer for the particular needs of the test administrator and/or counselor. Most of the criticisms of the Ability Explorer are minor, and could easily be corrected before publication of the final Technical Manual. Because the cost of the Ability Explorer is not prohibitive, it should prove to be a widely-used assessment, that can provide much needed information for the exploration of career decisions.

References

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